

## CLAIMS

What is claimed is:

1. A latch assembly to connect a component to a rack, the assembly comprising:
  - a latch spring connected to a component and moveable between an engaged and a disengaged position, wherein in the engaged position said latch spring is engaged with a catch that is connected to a rack and in the disengaged position said latch spring is disengaged from the catch; and
  - a lever connected to the component and rotatable about an axis of rotation between a latched position and an unlatched position, wherein rotation of said lever from the latched position to the unlatched position moves said latch spring from the engaged position to the disengaged position in a direction parallel to the axis of rotation.
2. The latch assembly of claim 1 wherein said latch spring further comprises:
  - a fixed end connected to the component;
  - a spring body extending from said fixed end at an angle to the component;
  - and
  - an engaging end disposed on said spring body opposite said fixed end, wherein said engaging end is operable to engage the catch.
3. The latch assembly of claim 2 wherein said engaging end further comprises:
  - a disengaging surface extending from and at an angle to said spring body;
  - and
  - an offset surface extending from and at an angle to said disengaging surface.
4. The latch assembly of claim 3 wherein said offset surface is parallel to said fixed end.

5. The latch assembly of claim 3 wherein said engaging end further comprises an engaging surface extending from said offset surface in a direction toward said fixed end.
6. The latch assembly of claim 1 further comprising a receptacle disposed on the catch and sized so as to receive one end of said latch spring.
7. The latch assembly of claim 1 wherein the catch is connected to a rail assembly that is connected to the rack.
8. The latch assembly of claim 1 wherein said lever further comprises:
  - a body having a longitudinal axis;
  - an axle extending from said body and rotatably connected to the component;
  - a paddle extending from said body in a direction perpendicular to the longitudinal axis of said body.
9. The latch assembly of claim 8 wherein said paddle is operable to maintain said latch spring in the disengaged position when said lever is in the unlatched position.
10. The latch assembly of claim 1 wherein said lever rotates approximately 90 degrees between the latched and unlatched positions.
11. The latch assembly of claim 10 further comprising a torsion spring operable to urge said lever to the latched position.
12. A method for interfacing a component with a rack, the method comprising:
  - engaging a latch spring connected to the component with a catch connected to the rack;

disengaging the latch spring from the catch by rotating a lever about an axis so as to move the latch spring in a direction parallel to the axis; and  
sliding the component at least partially out of the rack.

13. The method of claim 12 wherein the latch spring is disengaged by a paddle disposed on the lever engaging a disengaging surface of the latch spring and urging the latch spring in a direction parallel to the axis and out of engagement with the catch.

14. The method of claim 13 further comprising rotating the lever to an unlatched position wherein the paddle disengages from the disengaging surface.

15. The method of claim 14 wherein a torsion spring urges the lever to the unlatched position.

16. The method of claim 14 further comprising sliding the component back into the rack such that an engaging surface of the latch spring contacts the catch and urges the latch spring to a position that allows the latch spring to engage the catch.

17. A latch comprising:  
means for engaging a latch spring and a catch as a component is slid into a rack; and  
means for disengaging the latch spring and the catch by rotating a lever about an axis from a latched position to an unlatched position in order to move the latch spring in a direction parallel to the axis.

18. The server latch of claim 17 further comprising means for returning the lever to the latched position.

19. The server latch of claim 17 wherein the latch spring is connected to a chassis supporting the component and the catch is connected to a rail assembly mounted in the rack.